

ABSTRACT

In 2004, an estimated 980 sockeye salmon escaped ocean fisheries and entered Salmon Lake to spawn. This escapement level fell within the range of the previous three escapement estimates, the only three escapement estimates available for this system. Approximately 22% of this escapement was made up of age-1.1 males (e.g. jacks), a percentage also falling within the range observed in the three previous years. In all four years, the escapement was estimated with a weir-based mark-recapture study. This approach works well for this system, as some fish have passed through the weir undetected in all years, making the unadjusted weir counts an unreliable indicator of escapement magnitude. However, as crews need to handle a large number of fish to collect age, length, and sex information, an additional mark-recapture study to validate or adjust the weir count is cost-effective and easily accomplished in Salmon Lake.